



STATE MINING AND GEOLOGY BOARD

EXECUTIVE OFFICER'S REPORT

For Meeting Date: July 8, 2010

Agenda Item No. 10: Report on Seismic Hazard Mapping Act: Updating Recommended Procedures for Required Site Investigations. [Information]

INTRODUCTION: The Seismic Hazards Mapping Act (SHMA; Public Resources Code Section 2690 et seq.) requires site-specific assessment of seismic hazards for most buildings constructed for human occupancy within designated seismic hazard zones in California. The burden of proof is on the developer to demonstrate that the site can be developed safely. Special Publication 117, "*Guidelines for Evaluating and Mitigating Seismic Hazards in California*", was prepared to help establish standards for site investigations within Official Seismic Hazard Zones, and has proven instrumental in raising the standards of geotechnical practice for evaluating seismic hazards since its first publication in 1997. Post-earthquake investigations worldwide and attendant advancements in earthquake science and engineering resulted in the 2008 revision of the Guidelines.

While the Guidelines represent a target for the scope and content of geotechnical site investigations, the need for more specific advice on "how to" was requested by the City and County of Los Angeles, which resulted in publication of two important supplementary documents that addresses procedures for field and laboratory analyses: "*Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California*", and a second report of similar title addressing landslide hazards. These documents, published in 1999 and 2002, respectively, were the result of two ad hoc working groups organized through the southern California Chapter of the American Society of Civil Engineers, and published through the Southern California Earthquake Center. While adopted in southern California practice, they have also been used by a few communities in northern California. No equivalent document has been prepared and vetted by the geotechnical profession in northern California, where practice differs somewhat.

These two documents are now out-of-date and need to be brought into sync with the updated SP 117A guidelines, which provides an important opportunity to solicit input from northern California practice and publish under State seal a single set of documents having statewide applicability.

The report being presented by the California Geological Survey is for the SMGB's general information, and its consideration in updating recommended procedures for required site investigations under the SHMA.



Executive Officer's Report

No recommendations are offered by the Executive Officer at this time.

Respectfully submitted:

Stephen M. Testa
Executive Officer